21. (Amended) A method of analyzing a power line to increase the power handling capability of the power line comprising:

providing data of a conductor, a plurality of supports, and swing information of a plurality of insulators intermediate the conductor and respective ones of the supports of an existing power line configured to transmit electrical energy, the existing power line being configured according to initial design parameters [and comprising a conductor supported by a plurality of supports];

providing a first model of the existing power line configured according to the initial design parameters using the data, the first model including the swing information of the insulators;

analyzing the first model of the existing power line at an increased operating condition to identify a violation of the conductor responsive to the increased operating condition; and

[after] responsive to the analyzing, altering the initial design parameters to provide a second model of the existing power line configured according to modified design parameters different than the initial design parameters to provide a design having increased power handling capability of the conductor, the second model including swing information of the insulators different than the swing information of the first model.

Please cancel claim 29.

114 37. (Amended) The method according to claim 21 further comprising analyzing the second model including the swing information of the insulators with respect to current safety code.

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2 38. (Amended) A method of analyzing a power line to increase the power handling capability of the power line comprising:

providing data of an existing power line configured to transmit electrical energy, the existing power line being configured according to initial design parameters and comprising a conductor coupled with a plurality of insulators and supported by a plurality of supports defining a plurality of spans, the data including swing information of the insulators;

providing a first model of the existing power line configured according to the initial design parameters using the data, the providing the first model comprising providing [a steady state first model of the existing power line including resolving forces in a static equilibrium calculation] the first model including swing information of the insulators;

analyzing the first model of the existing power line at an increased operating condition to identify a violation of the conductor responsive to the increased operating condition;

[after] responsive to the analyzing, altering the initial design parameters to provide a second model of the existing power line including swing information of the insulators and configured according to modified

design parameters different than the initial design parameters to provide a design having increased power handling capability of the conductor, wherein the altering comprises at least one of adjusting a location of clamp relative to the conductor and removing a portion of the conductor; and

analyzing the second model of the existing power line at an increased operating condition.

~~39~~ 40. (Amended) An article of manufacture comprising:

a computer usable medium having computer useable code embodied therein and configured to cause a processor to perform steps comprising:

receiving data of a conductor, a plurality of supports, and swing information of a plurality of insulators intermediate the conductor and respective ones of the supports of an existing power line configured to transmit electrical energy, the existing power line being configured according to initial design parameters [and comprising a conductor supported by a plurality of supports];

providing a first model of the existing power line configured according to the initial design parameters using the data, the first model including the swing information of the insulators;

analyzing the first model of the existing power line at an increased operating condition to identify a violation of the conductor responsive to the increased operating condition; and

[after] responsive to the analyzing, altering the initial design parameters to provide a second model of the existing power line configured according to modified design parameters different than the initial design parameters to provide a design having increased power handling capability of the conductor, the second model including swing information of the insulators different than the swing information of the first model.

Please add the following new claims:

17 41. The method according to claim 21 1 wherein the providing data comprises providing data including a plurality of different tensions of the conductor in a plurality of respective spans.

18 42. The method according to claim 41 17 wherein the providing the first model comprises providing the first model including different tensions of the conductor using the data and the altering comprises altering to provide the second model including tensions of the conductor different than the tensions of the first model.

19 43. The method according to claim 21 1 further comprising identifying a portion of the conductor after the analyzing and the altering comprises removing the portion conductor.

20 ~~44~~. The method according to claim 21 further comprising verifying the second model including the swing information of the insulators against clearances.

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